Name of Work:Improvements to Roads and Drains at Vemanna Layout and Surrounding areas in Ward No. 13, (Doddabommasandra)

EMB

"FIRST AND FINAL BILL"

Name of Work:Improvements to Roads and Drains at Vemanna Layout and Surrounding areas in Ward No. 13, (Doddabommasandra)

PRE MEASUREMENT SHEETS

"FIRST AND FINAL BILL"

Name of Work:Improvements to Roads and Drains at Vemanna Layout and Surrounding areas in Ward No. 13, (Doddabommasandra)

Detailed Measurements

Date of Measurements

Item No	Discription of Item	No	Length	Breadth	Depth	Qty	Unit
1	Removing and resetting of footpath slab						
	Vemmanna Layout						
	Main Rd						
	LHS						
	Ch: 0.00m to 20.00m	1	20.00	0.90		18.00	
	Ch: 20.00m to 25.00m Culvert Gap		5.00				
	Ch: 25.00m to 37.00m	1	12.00	0.90		10.80	
	Ch: 37.00m to 48.00m	1	11.00			0.00	
	Ch: 48.00m to 53.40m Culvert Gap		5.40				
	Ch: 53.40m to 66.40m	1	13.00	0.90		11.70	
	Ch: 66.40m to 75.40m	1	9.00	0.90		8.10	
	Ch: 75.40m to 80.40m	1	5.00	0.90		4.50	
	RHS						
	Ch: 0.00m to 21.50m	1	21.50	0.90		19.35	
	Ch: 21.50m to 34.50m	1	13.00	0.90		11.70	
	Ch: 34.50m to 42.50m Gap		8.00				
	Ch: 42.50m to 51.50m	1	9.00	0.90		8.10	
	Ch: 51.50m to 57.00m Gap		5.50				
	Ch: 57.00m to 72.00m	1	15.00	0.90		13.50	
	Ch: 72.00m to 75.00m Tree Gap		3.00				
	Ch: 75.00m to 103.00m	1	28.00	0.90		25.20	
	Ch: 103.00m to 115.00m	1	12.00	0.90		10.80	
	Ch: 115.00m to 121.00m Culvert Gap		6.00				
	Ch: 121.00m to 136.00m	1	15.00	0.90		13.50	
					Total Qty	**155.25**	**Sqm**

Contractor

Asst.Engineer

Asst.Exec.Engineer

Assistant Executive Engine
Vidyaranyapura Sub Divisi
B.B.M.P, Bangalore - 97

Name of Work:Improvements to Roads and Drains at Vemanna Layout and Surrounding areas in Ward No. 13, (Doddabommasandra)

Detailed Measurements

Date of Measurements

Item No	Discription of Item	No	Length	Breadth	Depth	Qty	Unit
2	Earth work Excavation by manual means for drains,canals, waste weir, draft, approach channels, key trenches, foundation of bridges and such simillar works in all kinds of soils , as per drawing and technical specifications, including setting out, shoring, strutting, barricading, caution lights, removal of stumps and other deleterious matter, excavated surface leveled and sides neatly dressed disposing off the excavated stuff or sorting & stacking the selected stuff for reuse in a radius of 50 m and lift upto 1.5 m including cost of labour, tools & other appurtenaces						
	RCC Darin						
	Munireddy Layout						
	2nd A Cross Rd						
	Ch: 0.00m to 20.00m	1	20.00	1.10	1.00	22.00	
	Ch: 20.00m to 23.60m	1	3.60	1.10	1.00	3.96	
	Ch: 23.60m to 28.00m	1	4.40	1.10	1.00	4.84	
	Ch: 28.00m to 31.70m	1	3.70	1.10	1.00	4.07	
	Ch: 31.70m to 37.40m	1	5.70	1.10	1.00	6.27	
	Ch: 37.40m to 38.60m	1	1.20	1.10	1.00	1.32	
	Ch: 38.60m to 42.20m	1	3.60	1.10	1.00	3.96	
	Ch: 42.20m to 51.90m	1	9.70	1.10	1.00	10.67	
	Ch: 51.90m to 55.40m	1	3.50	1.10	1.00	3.85	
	Ch: 55.40m to 61.50m	1	6.10	1.10	1.00	6.71	
	Ch: 61.50m to 80.90m	1	19.40	1.10	1.00	21.34	
	Cross Rd						
	Ch: 0.00m to 11.40m	1	11.40	1.10	1.00	12.54	
	Drain Desilt						
	Main Rd						
	LHS						
	Ch: 0.00m to 20.00m	1	20.00	0.60	0.60	7.20	
	Ch: 20.00m to 25.00m Culvert Gap		5.00				
	Ch: 25.00m to 37.00m	1	12.00	0.60	0.55	3.96	
	Ch: 37.00m to 48.00m	1	11.00	0.60	0.50	3.30	
	Ch: 48.00m to 53.40m Culvert Gap		5.40				
	Ch: 53.40m to 66.40m	1	13.00	0.60	0.65	5.07	
	Ch: 66.40m to 75.40m	1	9.00	0.60	0.60	3.24	
	Ch: 75.40m to 80.40m	1	5.00	0.60	0.60	1.80	

Contractor Consultant Asst.Engineer Asst.Exec.Engineer

Assistant Executive Engineer
Vidyaranyapura Sub Division
B.B.M.P, Bangalore - 97

Item No	Discription of Item	No	Length	Breadth	Depth	Qty	Unit
	Ch: 80.40m to 86.40m Culvert Gap		6.00				
	Ch: 86.40m to 91.40m	1	5.00	0.60	0.55	1.65	
	Ch: 91.40m to 97.40m Gap		6.00				
	Ch: 97.40m to 117.80m	1	20.40	0.60	0.50	6.12	
	Ch: 117.80m to 125.40m Culvert		7.60				
	Ch: 124.40m to 145.00m	1	19.60	0.60	0.60	7.06	
	RHS						
	Ch: 0.00m to 21.50m	1	21.50	0.60	0.65	8.39	
	Ch: 21.50m to 34.50m	1	13.00	0.60	0.55	4.29	
	Ch: 34.50m to 42.50m Gap		8.00				
	Ch: 42.50m to 51.50m	1	9.00	0.60	0.60	3.24	
	Ch: 51.50m to 57.00m Gap		5.50				
	Ch: 57.00m to 72.00m	1	15.00	0.60	0.65	5.85	
	Ch: 72.00m to 75.00m Tree Gap		3.00				
	Ch: 75.00m to 103.00m	1	28.00	0.60	0.60	10.08	
	Ch: 103.00m to 115.00m	1	12.00	0.60	0.55	3.96	
	Ch: 115.00m to 121.00m Culvert Gap		6.00				
	Ch: 121.00m to 136.00m	1	15.00	0.60	0.60	5.40	
	Ch: 136.00m to 154.00m	1	18.00	0.60	0.55	5.94	
	Asphalt Road						
	Vemmanna Layout						
	1st Cross Rd						
	Ch: 0.00m to 30.00m	2	30.00	0.30	0.20	3.60	
	Ch: 30.00m to 60.00m	2	30.00	0.35	0.20	4.20	
	Ch: 60.00m to 84.00m	2	24.00	0.25	0.20	2.40	
	Ch: 84.00m to 114.00m	2	30.00	0.20	0.20	2.40	
	Ch: 114.00m to 144.00m	2	30.00	0.40	0.20	4.80	
	Ch: 144.00m to 174.00m	2	30.00	0.30	0.20	3.60	
	Ch: 174.00m to 180.80m	2	6.80	0.40	0.20	1.09	
	Ch: 180.80m to 182.80m	2	2.00	0.30	0.20	0.24	
	3rd Cross Rd						
	Ch: 0.00m to 30.00m	2	30.00	0.40	0.20	4.80	
	Ch: 30.00m to 60.00m	2	30.00	0.30	0.20	3.60	
	Ch: 60.00m to 65.20m	2	5.20	0.20	0.20	0.42	
	Munireddy Layout						
	2nd A Cross Rd						
	Ch: 0.00m to 30.00m	2	30.00	0.40	0.20	4.80	
	Ch: 30.00m to 60.00m	2	30.00	0.30	0.20	3.60	
	Ch: 60.00m to 83.40m	2	23.40	0.40	0.20	3.74	
	2nd B Cross Rd						

Contractor Consultant Asst.Engineer Asst.Exec.Engineer

Assistant Executive Engineer
Vidyaranyapura Sub Division
B.B.M.P, Bangalore - 97

Item No	Discription of Item	No	Length	Breadth	Depth	Qty	Unit
	Ch: 0.00m to 30.00m	2	30.00	0.40	0.20	4.80	
	Ch: 30.00m to 60.00m	2	30.00	0.35	0.20	4.20	
	Main Rd						
	Ch: 0.00m to 30.00m	2	30.00	0.35	0.20	4.20	
	Ch: 30.00m to 50.00m	2	20.00	0.40	0.20	3.20	
	Ch: 50.00m to 80.00m	2	30.00	0.45	0.20	5.40	
	Ch: 80.00m to 107.30m	2	27.30	0.40	0.20	4.37	
					Total Qty	**257.53**	**Cum**

Contractor

Consultant

Asst.Engineer

Asst.Exec.Engineer

Assistant Executive Enginee
Vidyaranyapura Sub Divisio
B.B.M.P, Bangalore - 97

Name of Work:Improvements to Roads and Drains at Vemanna Layout and Surrounding areas in Ward No. 13, (Doddabommasandra)

Detailed Measurements

Date of Measurements

Item No	Discription of Item	No	Length	Breadth	Depth	Qty	Unit
3	Providing and laying in position Plain Cement Concrete Mix 1:3:6 (M10) for levelling course for all works in foundation. Using 40 mm nominal size graded crushed coarse aggregates and fine aggregates as per relevant IS Codes machine mixed, laid in layers not exceeding 150 mm						
	RCC Darin						
	Munireddy Layout						
	2nd A Cross Rd						
	Ch: 0.00m to 20.00m	1	20.00	1.10	0.15	3.30	
	Ch: 20.00m to 23.60m	1	3.60	1.10	0.15	0.59	
	Ch: 23.60m to 28.00m	1	4.40	1.10	0.15	0.73	
	Ch: 28.00m to 31.70m	1	3.70	1.10	0.15	0.61	
	Ch: 31.70m to 37.40m	1	5.70	1.10	0.15	0.94	
	Ch: 37.40m to 38.60m	1	1.20	1.10	0.15	0.20	
	Ch: 38.60m to 42.20m	1	3.60	1.10	0.15	0.59	
	Ch: 42.20m to 51.90m	1	9.70	1.10	0.15	1.60	
	Ch: 51.90m to 55.40m	1	3.50	1.10	0.15	0.58	
	Ch: 55.40m to 61.50m	1	6.10	1.10	0.15	1.01	
	Ch: 61.50m to 80.90m	1	19.40	1.10	0.15	3.20	
	Cross Rd						
	Ch: 0.00m to 11.40m	1	11.40	1.10	0.15	1.88	
					Total Qty	**15.23**	**Cum**

Contractor

Asst.Engineer

Asst.Executive Engineer

Assistant Executive Engineer
Vidyaranyapura Sub Division
B.B.M.P, Bangalore - 97

Name of Work:Improvements to Roads and Drains at Vemanna Layout and Surrounding areas in Ward No. 13, (Doddabommasandra)

Detailed Measurements

Date of Measurements

Item No	Discription of Item	No	Length	Breadth	Depth	Qty	Unit
6	Providing and laying in position plain cement concrete for levelling course for all works in foundation. The granite / trap / basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed, laid in layers not exceeding 150 mm thickness, well compacted using plate vibrators, including all lead & lifts, cost of all materials of quality, labour, Usage charges of machineries, curing, and all the other appurtenances required to complete the work as per technical specifications. (The cost of steel reinforcement & formwork shall be paid separately Mix 1:3:6 (M10) Using 20 mm nominal size graded crushed coarse aggregate						
	Drain Coping						
	Main Rd						
	RHS						
	Ch: 0.00m to 21.50m	2	21.50	0.15	0.10	0.65	
	Ch: 21.50m to 34.50m	2	13.00	0.15	0.10	0.39	
	Ch: 34.50m to 42.50m Gap		8.00				
	Ch: 42.50m to 51.50m	2	9.00	0.15	0.10	0.27	
	Ch: 51.50m to 57.00m Gap		5.50				
	Ch: 57.00m to 72.00m	2	15.00	0.15	0.10	0.45	
	Ch: 72.00m to 75.00m Tree Gap		3.00				
	Ch: 75.00m to 103.00m	2	28.00	0.15	0.10	0.84	
	Ch: 103.00m to 115.00m	2	12.00	0.15	0.10	0.36	
	Ch: 115.00m to 121.00m Culvert Gap		6.00				
	Ch: 121.00m to 136.00m	2	15.00	0.15	0.10	0.45	
	Ch: 136.00m to 154.00m	2	18.00	0.15	0.10	0.54	
	LHS						
	Ch: 0.00m to 20.00m	2	20.00	0.15	0.10	0.60	
	Ch: 20.00m to 25.00m Culvert Gap		5.00				
	Ch: 25.00m to 37.00m	2	12.00	0.15	0.10	0.36	
	Ch: 37.00m to 48.00m	2	11.00	0.15	0.10	0.33	
	Ch: 48.00m to 53.40m Culvert Gap		5.40				
	Ch: 53.40m to 66.40m	2	13.00	0.15	0.10	0.39	
	Ch: 66.40m to 75.40m	2	9.00	0.15	0.10	0.27	
	Ch: 75.40m to 80.40m	2	5.00	0.15	0.10	0.15	

Contractor

Asst.Engineer

Asst Exec Engineer

Assistant Executive Engineer
Vidyaranyapura Sub Division
B.B.M.P, Bangalore - 97

Item No	Discription of Item	No	Length	Breadth	Depth	Qty	Unit
	Ch: 80.40m to 86.40m Culvert Gap		6.00				
	Ch: 86.40m to 91.40m	2	5.00	0.15	0.10	0.15	
	Ch: 91.40m to 97.40m Gap		6.00				
	Ch: 97.40m to 117.80m	2	20.40	0.15	0.10	0.61	
	Ch: 117.80m to 125.40m Culvert		7.60				
	Ch: 124.40m to 145.00m	2	19.60	0.15	0.10	0.59	
					Total Qty	**7.40**	**Cum**

Contractor

Asst.Engineer

Asst.Executive Engineer

Assistant Executive Engineer
Vidyaranyapura Sub Division
B.B.M.P, Bangalore - 97

Name of Work:Improvements to Roads and Drains at Vemanna Layout and Surrounding areas in Ward No. 13, (Doddabommasandra)

Detailed Measurements

Date of Measurements

Item No	Discription of Item	No	Length	Breadth	Depth	Qty	Unit
7	Providing and laying in position Reinforced cement concrete for all Sub structures of building, Irrigation works, Sub structure works of bridges, Drain works & other parallel works from 0.50m to 3.50 m height. The granite/trap/basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed with super plasticisers, laid in layers, well compacted using needle vibrators, providing weep holes wherever necesary, including all lead & lifts, cost of all materials of quality, confirming to the requirements of relevant IS codes, labour, Usage charges of machinery, curing and all other appurtenances required to complete the work as per technical specifications. M20 (The cost of steel reinforcement &						
	RCC Darin Raft						
	Munireddy Layout						
	2nd A Cross Rd						
	Ch: 0.00m to 20.00m	1	20.00	0.90	0.15	2.70	
	Ch: 20.00m to 23.60m	1	3.60	0.90	0.15	0.49	
	Ch: 23.60m to 28.00m	1	4.40	0.90	0.15	0.59	
	Ch: 28.00m to 31.70m	1	3.70	0.90	0.15	0.50	
	Ch: 31.70m to 37.40m	1	5.70	0.90	0.15	0.77	
	Ch: 37.40m to 38.60m	1	1.20	0.90	0.15	0.16	
	Ch: 38.60m to 42.20m	1	3.60	0.90	0.15	0.49	
	Ch: 42.20m to 51.90m	1	9.70	0.90	0.15	1.31	
	Ch: 51.90m to 55.40m	1	3.50	0.90	0.15	0.47	
	Ch: 55.40m to 61.50m	1	6.10	0.90	0.15	0.82	
	Ch: 61.50m to 80.90m	1	19.40	0.90	0.15	2.62	
	Cross Rd						
	Ch: 0.00m to 11.40m	1	11.40	0.90	0.15	1.54	
	RCC Darin Wall						
	Munireddy Layout						
	2nd A Cross Rd						
	Ch: 0.00m to 20.00m	2	20.00	0.15	0.60	3.60	
	Ch: 20.00m to 23.60m	2	3.60	0.15	0.65	0.70	
	Ch: 23.60m to 28.00m	2	4.40	0.15	0.55	0.73	
	Ch: 28.00m to 31.70m	2	3.70	0.15	0.60	0.67	
	Ch: 31.70m to 37.40m	2	5.70	0.15	0.65	1.11	
	Ch: 37.40m to 38.60m	2	1.20	0.15	0.55	0.20	
	Ch: 38.60m to 42.20m	2	3.60	0.15	0.55	0.59	
	Ch: 42.20m to 51.90m	2	9.70	0.15	0.60	1.75	
	Ch: 51.90m to 55.40m	2	3.50	0.15	0.55	0.58	

Contractor

Asst.Engineer

Asst.Exec.Engineer

Assistant Executive Engineer
Vidyaranyapura Sub Division
B.B.M.P, Bangalore - 97

Item No	Discription of Item	No	Length	Breadth	Depth	Qty	Unit
	Ch: 55.40m to 61.50m	2	6.10	0.15	0.60	1.10	
	Ch: 61.50m to 80.90m	2	19.40	0.15	0.65	3.78	
	Cross Rd						
	Ch: 0.00m to 11.40m	2	11.40	0.15	0.60	2.05	
	Bed Correction						
	Main Rd						
	LHS						
	Ch: 0.00m to 20.00m	1	20.00	0.60	0.15	1.80	
	Ch: 20.00m to 25.00m Culvert Gap		5.00				
	Ch: 25.00m to 37.00m	1	12.00	0.60	0.15	1.08	
	Ch: 37.00m to 48.00m	1	11.00	0.60	0.15	0.99	
	Ch: 48.00m to 53.40m Culvert Gap		5.40				
	Ch: 53.40m to 66.40m	1	13.00	0.60	0.15	1.17	
	Ch: 66.40m to 75.40m	1	9.00	0.60	0.15	0.81	
	Ch: 75.40m to 80.40m	1	5.00	0.60	0.15	0.45	
	Ch: 80.40m to 86.40m Culvert Gap		6.00				
	Ch: 86.40m to 91.40m	1	5.00	0.60	0.15	0.45	
	Ch: 91.40m to 97.40m Gap		6.00				
	Ch: 97.40m to 117.80m	1	20.40	0.60	0.15	1.84	
	Ch: 117.80m to 125.40m Culvert		7.60				
	Ch: 124.40m to 145.00m	1	19.60	0.60	0.15	1.76	
	RHS						
	Ch: 0.00m to 21.50m	1	21.50	0.60	0.15	1.94	
	Ch: 21.50m to 34.50m	1	13.00	0.60	0.15	1.17	
	Ch: 34.50m to 42.50m Gap		8.00				
	Ch: 42.50m to 51.50m	1	9.00	0.60	0.15	0.81	
	Ch: 51.50m to 57.00m Gap		5.50				
	Ch: 57.00m to 72.00m	1	15.00	0.60	0.15	1.35	
	Ch: 72.00m to 75.00m Tree Gap		3.00				
	Ch: 75.00m to 103.00m	1	28.00	0.60	0.15	2.52	
	Ch: 103.00m to 115.00m	1	12.00	0.60	0.15	1.08	
	Ch: 115.00m to 121.00m Culvert Gap		6.00				
	Ch: 121.00m to 136.00m	1	15.00	0.60	0.15	1.35	
	Ch: 136.00m to 154.00m	1	18.00	0.60	0.15	1.62	
					Total Qty	**51.50**	**Cum**

Contractor

Asst.Engineer

Asst.Exec.Engineer

Assistant Executive Engineer
Vidyaranyapura Sub Division
B.B.M.P, Bangalore - 97

Name of Work:Improvements to Roads and Drains at Vemanna Layout and Surrounding areas in Ward No. 13, (Doddabommasandra)

Detailed Measurements

Measurement Recorded On:

Item No	Discription of Item		No	Length	Breadth	Depth	Qty	Unit
8	Supplying, Fitting and Placing un-coated TMT bar Reinforcement in sub-structure complete as per Drawing and Technical Specifications.							
	RCC Drain							
	Munireddy Layout							
	2nd A Cross Rd							
	LHS							
	Total Drain Length=80.90m							
	Main Bar 10mm dia @130mm c/c							
	d=0.61kg/m							
	Distrubution Bar 10mm dia @140mm c/c							
	d=0.61kg/m							
	No of U Bars=623		623	2.10		0.61	798.06	
	No of distrubution Bars=15		15	80.90		0.61	740.24	
	Cross Rd							
	LHS							
	Total Drain Length=11.40m							
	Main Bar 10mm dia @130mm c/c							
	d=0.61kg/m							
	Distrubution Bar 10mm dia @140mm c/c							
	d=0.61kg/m							
	No of U Bars=88		88	2.10		0.61	112.73	
	No of distrubution Bars=15		15	11.40		0.61	104.31	
							1755.34	
						Present Qty	**1.76**	**Tn**

Contractor Consultant Asst. Engineer Asst. Exec. Engineer

Assistant Executive Engineer
Vidyaranyapura Sub Division
B.B.M.P, Bangalore - 97

Name of Work:Improvements to Roads and Drains at Vemanna Layout and Surrounding areas in Ward No. 13, (Doddabommasandra)

Detailed Measurements

Date of Measurements

Item No	Discription of Item	No	Length	Breadth	Depth	Qty	Unit
13	Earth work in surface Excavation by mechanical means for lowering & leveling the ground for all works other than foundation in all kinds of soils & upto depth not exceeding 300mm as per drawing and technical specifications, including setting out, shoring,						
	Asphalt Road						
	Edge Correction/ Cut Porstion						
	Vemmanna Layout						
	1st Cross Rd						
	Ch: 0.00m to 30.00m	1	30.00	(1.50 + 1.20)/2	0.30	12.15	
	Ch: 30.00m to 60.00m	1	30.00	(1.20 + 1.00)/2	0.30	9.90	
	Ch: 60.00m to 84.00m	1	24.00	(1.00 + 1.50)/2	0.30	9.00	
	Ch: 84.00m to 114.00m	1	30.00	(1.00 + 0.90)/2	0.30	8.55	
	Ch: 114.00m to 144.00m	1	30.00	(0.90 + 1.20)/2	0.30	9.45	
	Ch: 144.00m to 174.00m	1	30.00	(1.20 + 1.10)/2	0.30	10.35	
	Ch: 174.00m to 180.80m	1	6.80	(1.10 + 1.00)/2	0.30	2.14	
	Ch: 180.80m to 182.80m	1	2.00	(3.40 + 3.40)/2	0.30	2.04	
	3rd Cross Rd						
	Ch: 0.00m to 30.00m	1	30.00	(0.90 + 1.00)/2	0.30	8.55	
	Ch: 30.00m to 60.00m	1	30.00	(1.00 + 0.90)/2	0.30	8.55	
	Ch: 60.00m to 65.20m	1	5.20	(0.90 + 1.00)/2	0.30	1.48	
	Munireddy Layout						
	2nd A Cross Rd						
	Ch: 0.00m to 30.00m	1	30.00	(1.20 + 1.30)/2	0.30	11.25	
	Ch: 30.00m to 60.00m	1	30.00	(1.30 + 1.20)/2	0.30	11.25	

Contractor

Asst.Engineer

Asst Exec. Engineer

Assistant Executive Engineer
Vidyaranyapura Sub Division
B.B.M.P, Bangalore - 97

Item No	Discription of Item	No	Length	Breadth	Depth	Qty	Unit
	Ch: 60.00m to 83.40m	1	23.40	(1.20 + 1.00)/2	0.30	7.72	
	2nd B Cross Rd						
	Ch: 0.00m to 30.00m	1	30.00	(1.50 + 1.00)/2	0.30	11.25	
	Ch: 30.00m to 60.00m	1	30.00	(1.00 + 1.00)/2	0.30	9.00	
	Main Rd						
	Ch: 0.00m to 30.00m	1	30.00	(0.90 + 1.00)/2	0.30	8.55	
	Ch: 30.00m to 50.00m	1	20.00	(1.00 + 1.30)/2	0.30	6.90	
	Ch: 50.00m to 80.00m	1	30.00	(0.90 + 1.00)/2	0.30	8.55	
	Ch: 80.00m to 107.30m	1	27.30	(1.20 + 0.90)/2	0.30	8.60	
	Profile Correction						
		1	2.00	3.00	0.30	1.80	
		1	5.00	4.00	0.30	6.00	
		1	2.00	6.00	0.30	3.60	
		1	4.00	4.00	0.30	4.80	
		1	5.00	3.00	0.30	4.50	
		1	4.00	4.00	0.30	4.80	
		1	5.00	3.00	0.30	4.50	
		1	6.00	2.50	0.30	4.50	
		1	2.00	5.00	0.30	3.00	
		1	5.00	4.00	0.30	6.00	
		1	2.00	6.00	0.30	3.60	
		1	4.00	4.00	0.30	4.80	
		1	5.00	3.00	0.30	4.50	
		1	4.00	4.00	0.30	4.80	
		1	5.00	3.00	0.30	4.50	
		1	6.00	3.00	0.30	5.40	
		1	7.00	4.00	0.30	8.40	
		1	5.00	6.00	0.30	9.00	
		1	3.00	4.00	0.30	3.60	
		1	5.00	3.00	0.30	4.50	
		1	6.00	4.00	0.30	7.20	
		1	7.00	3.00	0.30	6.30	
		1	9.00	2.50	0.30	6.75	
		1	5.00	5.00	0.30	7.50	
		1	6.00	4.00	0.30	7.20	
		1	2.00	6.00	0.30	3.60	

Contractor

Asst.Engineer

Asst.Exec.Engineer

Assistant Executive Engineer
Vidyaranyapura Sub Division
B.B.M.P, Bangalore - 97

Item No	Discription of Item	No	Length	Breadth	Depth	Qty	Unit
		1	4.00	4.00	0.30	4.80	
		1	5.00	3.00	0.30	4.50	
		1	4.00	4.00	0.30	4.80	
		1	5.00	3.00	0.30	4.50	
		1	6.0	2.5	0.30	4.50	
		1	4.00	4.00	0.30	4.80	
		1	5.00	3.00	0.30	4.50	
		1	6.00	3.00	0.30	5.40	Ufe
		1	7.00	4.00	0.30	8.40	
		1	5.00	6.00	0.30	9.00	
		1	3.00	4.00	0.30	3.60	
		1	5.00	3.00	0.25	3.75	
		1	6.00	5.00	0.20	6.00	
					Total Qty	**368.94**	**Cum**
					Upto 125%	**187.13**	**Cum**
					Above 125%	**181.81**	**Cum**

Contractor

Asst.Engineer

Asst.Exec.Engineer

Assistant Executive Engineer
Vidyaranyapura Sub Divisio
B.B.M.P, Bangalore - 97

Name of Work:Improvements to Roads and Drains at Vemanna Layout and Surrounding areas in Ward No. 13, (Doddabommasandra)

Detailed Measurements

Date of Measurements

Item No	Discription of Item	No	Length	Breadth	Depth	Qty	Unit
14	4 Providing, laying, spreading and compacting graded stone aggregate to Wet Mix Macadam specification including premixing the Material with water at OMC in mechanical mix plant carriage of mixed Material by tipper to site, laying in uniform layers with paver/grader in sub-						
	Asphalt Road						
	Edge Correction/ Cut Porstion						
	Vemmanna Layout						
	1st Cross Rd						
	Ch: 0.00m to 30.00m	1	30.00	(1.50 + 1.20)/2	0.25	10.13	
	Ch: 30.00m to 60.00m	1	30.00	(1.20 + 1.00)/2	0.25	8.25	
	Ch: 60.00m to 84.00m	1	24.00	(1.00 + 1.50)/2	0.25	7.50	
	Ch: 84.00m to 114.00m	1	30.00	(1.00 + 0.90)/2	0.25	7.13	
	Ch: 114.00m to 144.00m	1	30.00	(0.90 + 1.20)/2	0.25	7.88	qfe
	Ch: 144.00m to 174.00m	1	30.00	(1.20 + 1.10)/2	0.25	8.63	
	Ch: 174.00m to 180.80m	1	6.80	(1.10 + 1.00)/2	0.25	1.79	
	Ch: 180.80m to 182.80m	1	2.00	(3.40 + 3.40)/2	0.25	1.70	
	3rd Cross Rd						
	Ch: 0.00m to 30.00m	1	30.00	(0.90 + 1.00)/2	0.25	7.13	
	Ch: 30.00m to 60.00m	1	30.00	(1.00 + 0.90)/2	0.25	7.13	qfe
	Ch: 60.00m to 65.20m	1	5.20	(0.90 + 1.00)/2	0.25	1.24	
	Munireddy Layout						
	2nd A Cross Rd						
	Ch: 0.00m to 30.00m	1	30.00	(1.20 + 1.30)/2	0.20	7.50	
	Ch: 30.00m to 60.00m	1	30.00	(1.30 + 1.20)/2	0.20	7.50	

Contractor

Asst.Engineer

Asst.Exec.Engineer

Assistant Executive Engine
Vidyaranyapura Sub Divisi
B.B.M.P, Bangalore - 97

Item No	Discription of Item	No	Length	Breadth	Depth	Qty	Unit
	Ch: 60.00m to 83.40m	1	23.40	(1.20 + 1.00)/2	0.20	5.15	
	2nd B Cross Rd						
	Ch: 0.00m to 30.00m	1	30.00	(1.50 + 1.00)/2	0.20	7.50	
	Ch: 30.00m to 60.00m	1	30.00	(1.00 + 1.00)/2	0.20	6.00	
	Main Rd						
	Ch: 0.00m to 30.00m	1	30.00	(0.90 + 1.00)/2	0.20	5.70	
	Ch: 30.00m to 50.00m	1	20.00	(1.00 + 1.30)/2	0.20	4.60	
	Ch: 50.00m to 80.00m	1	30.00	(0.90 + 1.00)/2	0.20	5.70	
	Ch: 80.00m to 107.30m	1	27.30	(1.20 + 0.90)/2	0.20	5.73	
	Profile Correction						
		1	2.00	3.00	0.25	1.50	
		1	5.00	4.00	0.25	5.00	
		1	2.00	6.00	0.25	3.00	
		1	4.00	4.00	0.25	4.00	
		1	5.00	3.00	0.25	3.75	
		1	4.00	4.00	0.25	4.00	
		1	5.00	3.00	0.25	3.75	
		1	6.00	2.50	0.25	3.75	
		1	2.00	5.00	0.25	2.50	
		1	5.00	4.00	0.25	5.00	
		1	2.00	6.00	0.25	3.00	
		1	4.00	4.00	0.25	4.00	
		1	5.00	3.00	0.25	3.75	
		1	4.00	4.00	0.25	4.00	
		1	5.00	3.00	0.25	3.75	
		1	6.00	3.00	0.25	4.50	
		1	7.00	4.00	0.25	7.00	
		1	5.00	6.00	0.25	7.50	
		1	3.00	4.00	0.25	3.00	
		1	5.00	3.00	0.25	3.75	
		1	6.00	4.00	0.25	6.00	
		1	7.00	3.00	0.25	5.25	
		1	9.00	2.50	0.25	5.63	
		1	5.00	5.00	0.25	6.25	
		1	6.00	4.00	0.25	6.00	
		1	2.00	6.00	0.25	3.00	

Contractor

Asst.Engineer

Asst.Exec.Engineer

Assistant Executive Engine
Vidyaranyapura Sub Divisi
B.B.M.P, Bangalore - 97

Item No	Discription of Item	No	Length	Breadth	Depth	Qty	Unit
		1	4.00	4.00	0.25	4.00	
		1	5.00	3.00	0.25	3.75	
		1	4.00	4.00	0.25	4.00	
		1	5.00	3.00	0.25	3.75	
		1	6.0	2.5	0.25	3.75	
		1	4.00	4.00	0.25	4.00	
		1	5.00	3.00	0.25	3.75	
		1	6.00	3.00	0.25	4.50	
		1	7.00	4.00	0.25	7.00	
		1	5.00	6.00	0.25	7.50	
		1	3.00	4.00	0.25	3.00	
		1	5.00	3.00	0.20	3.00	
		1	6.00	5.00	0.20	6.00	
					Total Qty	**294.48**	**Cum**
					Upto 125%	**233.91**	**Cum**
					Above 125%	**60.56**	**Cum**

Contractor

Asst.Engineer

Asst.Executive Engineer

Assistant Executive Engine
Vidyaranyapura Sub Divisi
B.B.M.P, Bangalore - 97

Name of Work:Improvements to Roads and Drains at Vemanna Layout and Surrounding areas in Ward No. 13, (Doddabommasandra)

Detailed Measurements

Date of Measurements

Item No	Discription of Item	No	Length	Breadth	Depth	Qty	Unit
15	Providing and applying Primer Coat with SS1 grade Bitumen Emulsion on prepared surface of granular base including cleaning of road surface and spraying primer at the rate of 0.90 kg per m2 using mechanical						
	Asphalt Road						
	Edge Correction/ Cut Porstion						
	Vemmanna Layout						
	1st Cross Rd						
	Ch: 0.00m to 30.00m	1	30.00	(1.50 + 1.20)/2		40.50	
	Ch: 30.00m to 60.00m	1	30.00	(1.20 + 1.00)/2		33.00	
	Ch: 60.00m to 84.00m	1	24.00	(1.00 + 1.50)/2		30.00	
	Ch: 84.00m to 114.00m	1	30.00	(1.00 + 0.90)/2		28.50	
	Ch: 114.00m to 144.00m	1	30.00	(0.90 + 1.20)/2		31.50	
	Ch: 144.00m to 174.00m	1	30.00	(1.20 + 1.10)/2		34.50	
	Ch: 174.00m to 180.80m	1	6.80	(1.10 + 1.00)/2		7.14	
	Ch: 180.80m to 182.80m	1	2.00	(3.40 + 3.40)/2		6.80	
	3rd Cross Rd						
	Ch: 0.00m to 30.00m	1	30.00	(0.90 + 1.00)/2		28.50	
	Ch: 30.00m to 60.00m	1	30.00	(1.00 + 0.90)/2		28.50	
	Ch: 60.00m to 65.20m	1	5.20	(0.90 + 1.00)/2		4.94	
	Munireddy Layout						
	2nd A Cross Rd						
	Ch: 0.00m to 30.00m	1	30.00	(1.20 + 1.30)/2		37.50	
	Ch: 30.00m to 60.00m	1	30.00	(1.30 + 1.20)/2		37.50	

Contractor

Asst.Engineer

Asst.Exec.Engineer

Assistant Executive Enginee
Vidyaranyapura Sub Divisio
B.B.M.P, Bangalore - 97

Item No	Discription of Item	No	Length	Breadth	Depth	Qty	Unit
	Ch: 60.00m to 83.40m	1	23.40	(1.20 + 1.00) / 2		25.74	
	2nd B Cross Rd						
	Ch: 0.00m to 30.00m	1	30.00	(1.50 + 1.00) / 2		37.50	
	Ch: 30.00m to 60.00m	1	30.00	(1.00 + 1.00) / 2		30.00	
	Main Rd						
	Ch: 0.00m to 30.00m	1	30.00	(0.90 + 1.00) / 2		28.50	
	Ch: 30.00m to 50.00m	1	20.00	(1.00 + 1.30) / 2		23.00	
	Ch: 50.00m to 80.00m	1	30.00	(0.90 + 1.00) / 2		28.50	
	Ch: 80.00m to 107.30m	1	27.30	(1.20 + 0.90) / 2		28.67	
	Profile Correction						
		1	2.00	3.00		6.00	
		1	5.00	4.00		20.00	
		1	2.00	6.00		12.00	
		1	4.00	4.00		16.00	
		1	5.00	3.00		15.00	
		1	4.00	4.00		16.00	
		1	5.00	3.00		15.00	
		1	6.00	2.50		15.00	
		1	2.00	5.00		10.00	
		1	5.00	4.00		20.00	
		1	2.00	6.00		12.00	
		1	4.00	4.00		16.00	
		1	5.00	3.00		15.00	
		1	4.00	4.00		16.00	
		1	5.00	3.00		15.00	
		1	6.00	3.00		18.00	
		1	7.00	4.00		28.00	
		1	5.00	6.00		30.00	
		1	3.00	4.00		12.00	
		1	5.00	3.00		15.00	
		1	6.00	4.00		24.00	
		1	7.00	3.00		21.00	
		1	9.00	2.50		22.50	
		1	5.00	5.00		25.00	
		1	6.00	4.00		24.00	
		1	2.00	6.00		12.00	

Contractor

Asst.Engineer

Asst.Exec.Engineer

Assistant Executive Engin
Vidyaranyapura Sub Divis
B.B.M.P, Bangalore - 97

Item No	Discription of Item	No	Length	Breadth	Depth	Qty	Unit
		1	4.00	4.00		16.00	
		1	5.00	3.00		15.00	
		1	4.00	4.00		16.00	
		1	5.00	3.00		15.00	
		1	6.0	2.5		15.00	
		1	4.00	4.00		16.00	
		1	5.00	3.00		15.00	
		1	6.00	3.00		18.00	
		1	7.00	4.00		28.00	
		1	5.00	6.00		30.00	
		1	3.00	4.00		12.00	
		1	5.00	3.00		15.00	
		1	6.00	5.00		30.00	
					Total Qty	**1242.29**	**Sqm**
					Upto 125%	**935.63**	**Sqm**
					Above 125%	**306.66**	**Sqm**

Contractor

Asst.Engineer

Asst.Exec.Engineer

Assistant Executive Enginee
Vidyaranyapura Sub Divisio
B.B.M.P, Bangalore - 97

Name of Work:Improvements to Roads and Drains at Vemanna Layout and Surrounding areas in Ward No. 13, (Doddabommasandra)

Detailed Measurements

Date of Measurements

Item No	Discription of Item	No	Length	Breadth	Depth	Qty	Unit
16	Providing and laying Dense GradedBituminous Macadam with 40/60 TPH capacity HMP using crushed aggregates of specified grading, premixed with bituminous binder VG30, @ 4.5 per cent by weight of total mix and filler, transporting the hot mix to work site,laying with mechanical paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction						
	Asphalt Road						
	Edge Correction/ Cut Porstion						
	Vemmanna Layout						
	1st Cross Rd						
	Ch: 0.00m to 30.00m	1	30.00	(1.50 + 1.20)/2	0.05	2.03	
	Ch: 30.00m to 60.00m	1	30.00	(1.20 + 1.00)/2	0.05	1.65	
	Ch: 60.00m to 84.00m	1	24.00	(1.00 + 1.50)/2	0.05	1.50	
	Ch: 84.00m to 114.00m	1	30.00	(1.00 + 0.90)/2	0.05	1.43	
	Ch: 114.00m to 144.00m	1	30.00	(0.90 + 1.20)/2	0.05	1.58	
	Ch: 144.00m to 174.00m	1	30.00	(1.20 + 1.10)/2	0.05	1.73	
	Ch: 174.00m to 180.80m	1	6.80	(1.10 + 1.00)/2	0.05	0.36	
	Ch: 180.80m to 182.80m	1	2.00	(3.40 + 3.40)/2	0.05	0.34	
	3rd Cross Rd						
	Ch: 0.00m to 30.00m	1	30.00	(0.90 + 1.00)/2	0.05	1.43	
	Ch: 30.00m to 60.00m	1	30.00	(1.00 + 0.90)/2	0.05	1.43	
	Ch: 60.00m to 65.20m	1	5.20	(0.90 + 1.00)/2	0.05	0.25	
	Munireddy Layout						
	2nd A Cross Rd						
	Ch: 0.00m to 30.00m	1	30.00	(1.20 + 1.30)/2	0.05	1.88	

Contractor

Asst.Engineer

Asst.Exec.Engineer

Assistant Executive Engineer
Vidyaranyapura Sub Division
B.B.M.P, Bangalore - 97

Item No	Discription of Item	No	Length	Breadth	Depth	Qty	Unit
	Ch: 30.00m to 60.00m	1	30.00	(1.30 + 1.20)/2	0.05	1.88	
	Ch: 60.00m to 83.40m	1	23.40	(1.20 + 1.00)/2	0.05	1.29	
	2nd B Cross Rd						
	Ch: 0.00m to 30.00m	1	30.00	(1.50 + 1.00)/2	0.05	1.88	
	Ch: 30.00m to 60.00m	1	30.00	(1.00 + 1.00)/2	0.05	1.50	
	Main Rd						
	Ch: 0.00m to 30.00m	1	30.00	(0.90 + 1.00)/2	0.05	1.43	
	Ch: 30.00m to 50.00m	1	20.00	(1.00 + 1.30)/2	0.05	1.15	
	Ch: 50.00m to 80.00m	1	30.00	(0.90 + 1.00)/2	0.05	1.43	
	Ch: 80.00m to 107.30m	1	27.30	(1.20 + 0.90)/2	0.05	1.43	
	Profile Correction						
		1	2.00	3.00	0.05	0.30	
		1	5.00	4.00	0.05	1.00	
		1	2.00	6.00	0.05	0.60	
		1	4.00	4.00	0.05	0.80	
		1	5.00	3.00	0.05	0.75	
		1	4.00	4.00	0.05	0.80	
		1	5.00	3.00	0.05	0.75	
		1	6.00	2.50	0.05	0.75	
		1	2.00	5.00	0.05	0.50	
		1	5.00	4.00	0.05	1.00	
		1	2.00	6.00	0.05	0.60	
		1	4.00	4.00	0.05	0.80	
		1	5.00	3.00	0.05	0.75	
		1	4.00	4.00	0.05	0.80	
		1	5.00	3.00	0.05	0.75	
		1	6.00	3.00	0.05	0.90	
		1	7.00	4.00	0.05	1.40	
		1	5.00	6.00	0.05	1.50	
		1	3.00	4.00	0.05	0.60	
		1	5.00	3.00	0.05	0.75	
		1	6.00	4.00	0.05	1.20	
		1	7.00	3.00	0.05	1.05	
		1	9.00	2.50	0.05	1.13	
		1	5.00	5.00	0.05	1.25	

Contractor

Asst.Engineer

Asst Exec Engineer

Assistant Executive Enginee
Vidyaranyapura Sub Divisio
B.B.M.P, Bangalore - 97

Item No	Discription of Item	No	Length	Breadth	Depth	Qty	Unit
		1	6.00	4.00	0.05	1.20	
		1	2.00	6.00	0.05	0.60	
		1	4.00	4.00	0.05	0.80	
		1	5.00	3.00	0.05	0.75	
		1	4.00	4.00	0.05	0.80	
		1	5.00	3.00	0.05	0.75	
		1	6.0	2.5	0.05	0.75	
		1	4.00	4.00	0.05	0.80	
		1	5.00	3.00	0.05	0.75	
		1	6.00	3.00	0.05	0.90	
		1	7.00	4.00	0.05	1.40	
		1	5.00	6.00	0.05	1.50	
		1	3.00	4.00	0.05	0.60	
		1	5.00	3.00	0.05	0.75	
		1	6.00	5.00	0.05	1.50	
					Total Qty	**62.11**	**Cum**
					Upto 125%	**46.79**	**Cum**
					Above 125%	**15.33**	**Cum**

Contractor

Asst.Engineer

Assistant Executive Engineer
Vidyaranyapura Sub Divisio
B.B.M.P, Bangalore - 97

Name of Work:Improvements to Roads and Drains at Vemanna Layout and Surrounding areas in Ward No. 13, (Doddabommasandra)

Detailed Measurements

Date of Measurements

Item No	Discription of Item	No	Length	Breadth	Depth	Qty	Unit
17	Providing and applying Tack Coat with RS1 Bituminous Emulsion using emulsion pressure distributor at the rate of 0.25 kg/m2 on the prepared bituminous surface cleaned with mechanical broom						
	For DBM						
	Asphalt Road						
	Edge Correction/ Cut Porstion						
	Vemmanna Layout						
	1st Cross Rd						
	Ch: 0.00m to 30.00m	1	30.00	(1.50 + 1.20)/2		40.50	
	Ch: 30.00m to 60.00m	1	30.00	(1.20 + 1.00)/2		33.00	
	Ch: 60.00m to 84.00m	1	24.00	(1.00 + 1.50)/2		30.00	
	Ch: 84.00m to 114.00m	1	30.00	(1.00 + 0.90)/2		28.50	
	Ch: 114.00m to 144.00m	1	30.00	(0.90 + 1.20)/2		31.50	
	Ch: 144.00m to 174.00m	1	30.00	(1.20 + 1.10)/2		34.50	
	Ch: 174.00m to 180.80m	1	6.80	(1.10 + 1.00)/2		7.14	
	Ch: 180.80m to 182.80m	1	2.00	(3.40 + 3.40)/2		6.80	
	3rd Cross Rd						
	Ch: 0.00m to 30.00m	1	30.00	(0.90 + 1.00)/2		28.50	
	Ch: 30.00m to 60.00m	1	30.00	(1.00 + 0.90)/2		28.50	
	Ch: 60.00m to 65.20m	1	5.20	(0.90 + 1.00)/2		4.94	
	Munireddy Layout						
	2nd A Cross Rd						
	Ch: 0.00m to 30.00m	1	30.00	(1.20 + 1.30)/2		37.50	

Contractor

Asst.Engineer

Asst.Exec.Engineer

Assistant Executive Engi
Vidyaranyapura Sub Divis
B.B.M.P, Bangalore - 9

Item No	Discription of Item	No	Length	Breadth	Depth	Qty	Unit
	Ch: 30.00m to 60.00m	1	30.00	(1.30 + 1.20)/2		37.50	
	Ch: 60.00m to 83.40m	1	23.40	(1.20 + 1.00)/2		25.74	
	2nd B Cross Rd						
	Ch: 0.00m to 30.00m	1	30.00	(1.50 + 1.00)/2		37.50	
	Ch: 30.00m to 60.00m	1	30.00	(1.00 + 1.00)/2		30.00	
	Main Rd						
	Ch: 0.00m to 30.00m	1	30.00	(0.90 + 1.00)/2		28.50	
	Ch: 30.00m to 50.00m	1	20.00	(1.00 + 1.30)/2		23.00	
	Ch: 50.00m to 80.00m	1	30.00	(0.90 + 1.00)/2		28.50	
	Ch: 80.00m to 107.30m	1	27.30	(1.20 + 0.90)/2		28.67	
	For BC						
	Asphalt Road						
	Vemmanna Layout						
	1st Cross Rd						
	Ch: 0.00m to 30.00m	1	30.00	(6.50 + 5.70)/2		183.00	
	Ch: 30.00m to 60.00m	1	30.00	(5.70 + 5.00)/2		160.50	
	Ch: 60.00m to 84.00m	1	24.00	(5.00 + 6.60)/2		139.20	
	Ch: 84.00m to 114.00m	1	30.00	(4.70 + 4.80)/2		142.50	
	Ch: 114.00m to 144.00m	1	30.00	(4.80 + 5.30)/2		151.50	
	Ch: 144.00m to 174.00m	1	30.00	(5.30 + 4.70)/2		150.00	
	Ch: 174.00m to 180.80m	1	6.80	(4.70 + 4.70)/2		31.96	
	Ch: 180.80m to 182.80m	1	2.00	(3.40 + 3.40)/2		6.80	
	3rd Cross Rd						
	Ch: 0.00m to 30.00m	1	30.00	(4.40 + 4.40)/2		132.00	
	Ch: 30.00m to 60.00m	1	30.00	(4.40 + 4.30)/2		130.50	

Contractor

Asst.Engineer

Asst.Executive Engineer

Assistant Executive Engi
Vidyaranyapura Sub Divis
B.B.M.P, Bangalore - 9

Item No	Discription of Item	No	Length	Breadth	Depth	Qty	Unit
	Ch: 60.00m to 65.20m	1	5.20	(4.30 + 4.40)/2		22.62	
	Munireddy Layout						
	2nd A Cross Rd						
	Ch: 0.00m to 30.00m	1	30.00	(5.00 + 4.70)/2		145.50	
	Ch: 30.00m to 60.00m	1	30.00	(4.70 + 4.85)/2		143.25	
	Ch: 60.00m to 83.40m	1	23.40	(4.85 + 4.10)/2		104.72	
	2nd B Cross Rd						
	Ch: 0.00m to 30.00m	1	30.00	(5.95 + 3.65)/2		144.00	
	Ch: 30.00m to 60.00m	1	30.00	(3.65 + 2.40)/2		90.75	
	Main Rd						
	Ch: 0.00m to 30.00m	1	30.00	(4.45 + 4.00)/2		126.75	
	Ch: 30.00m to 50.00m	1	20.00	(4.00 + 6.10)/2		101.00	
	Ch: 50.00m to 80.00m	1	30.00	(4.35 + 4.30)/2		129.75	
	Ch: 80.00m to 107.30m	1	27.30	(5.10 + 4.90)/2		136.50	
	Profile Correction						
		1	2.00	3.00		6.00	
		1	5.00	4.00		20.00	
		1	2.00	6.00		12.00	
		1	4.00	4.00		16.00	
		1	5.00	3.00		15.00	
		1	4.00	4.00		16.00	
		1	5.00	3.00		15.00	
		1	6.00	2.50		15.00	
		1	2.00	5.00		10.00	
		1	5.00	4.00		20.00	
		1	2.00	6.00		12.00	
		1	4.00	4.00		16.00	
		1	5.00	3.00		15.00	
		1	4.00	4.00		16.00	
		1	5.00	3.00		15.00	
		1	6.00	3.00		18.00	
		1	7.00	4.00		28.00	
		1	5.00	6.00		30.00	

Contractor

Asst.Engineer

Asst.Executive Engineer

Assistant Executive Engi
Vidyaranyapura Sub Divi
B.B.M.P, Bangalore - 9

Item No	Discription of Item	No	Length	Breadth	Depth	Qty	Unit
		1	3.00	4.00		12.00	
		1	5.00	3.00		15.00	
		1	6.00	4.00		24.00	
		1	7.00	3.00		21.00	
		1	9.00	2.50		22.50	
		1	5.00	5.00		25.00	
		1	6.00	4.00		24.00	
		1	2.00	6.00		12.00	
		1	4.00	4.00		16.00	
		1	5.00	3.00		15.00	
		1	4.00	4.00		16.00	
		1	5.00	3.00		15.00	
		1	6.0	2.5		15.00	
		1	4.00	4.00		16.00	
		1	5.00	3.00		15.00	
		1	6.00	3.00		18.00	
		1	7.00	4.00		28.00	
		1	5.00	6.00		30.00	
		1	3.00	4.00		12.00	
		1	5.00	3.00		15.00	
		1	6.00	5.00		30.00	
					Total Qty	**3615.08**	**Sqm**
					Upto 125%	**3118.75**	**Sqm**
					Above 125%	**496.33**	**Sqm**

Contractor

Asst.Engineer

Asst.Exec.Engineer

Assistant Executive Eng
Vidyaranyapura Sub Div
B.B.M.P, Bangalore -

Name of Work:Improvements to Roads and Drains at Vemanna Layout and Surrounding areas in Ward No. 13, (Doddabommasandra)

Detailed Measurements

Date of Measurements

Item No	Discription of Item	No	Length	Breadth	Depth	Qty	Unit
20	Loading and Unloading of Stone Boulder / Stone aggregates / Sand / Kankar / Moorum. (Tipper 14 m3)						
	From Item No -02					257.53	
	From Item No -13					368.94	
					Total Qty	**626.46**	**Cum**
					Upto 125%	**521.69**	**Cum**
					Above 125%	**104.78**	**Cum**

Contractor

Asst.Engineer

Asst.Exec.Engineer

Assistant Executive Engineer
Vidyaranyapura Sub Division
B.B.M.P, Bangalore - 97

Name of Work:Improvements to Roads and Drains at Vemanna Layout and Surrounding areas in Ward No. 13, (Doddabommasandra)

Detailed Measurements

Date of Measurements

Item No	Discription of Item	No	Length	Breadth	Depth	Qty	Unit
21	Cost of Haulage Excluding Loading and Unloading Taking output 18 t load and lead 10 km = 180 t.km						
	From Item no-20	1	626.46	1.28		801.87	
					Total Qty	**801.87**	**T.Km**
					Upto 125%	**667.75**	**T.Km**
					Above 125%	**134.12**	**T.Km**

Contractor

Asst.Engineer

Asst.Exec.Engineer

Assistant Executive Engin
Vidyaranyapura Sub Divisi
B.B.M.P, Bangalore - 97

Name of Work:Improvements to Roads and Drains at Vemanna Layout and Surrounding areas in Ward No. 13, (Doddabommasandra)

Detailed Measurements

Date of Measurements

Item No	Discription of Item	No	Length	Breadth	Depth	Qty	Unit
E1	Providing and constructing load bearing wall with Solid Concrete blocks of size 400x150x200mm having block density more than 1800kg/m3 and minimum compressive strength of 4.00 N/mm2 conforming to IS 2185 (Part - I) - 2005 and constructed with CM 1:4						
	Flagging Course						
	Main Rd						
	RHS						
	Ch: 0.00m to 21.50m	2	21.50	0.20		8.60	
	Ch: 21.50m to 34.50m	2	13.00	0.20		5.20	
	Ch: 34.50m to 42.50m Gap		8.00				
	Ch: 42.50m to 51.50m	2	9.00	0.20		3.60	
	Ch: 51.50m to 57.00m Gap		5.50				
	Ch: 57.00m to 72.00m	2	15.00	0.20		6.00	
	Ch: 72.00m to 75.00m Tree Gap		3.00				
	Ch: 75.00m to 103.00m	2	28.00	0.20		11.20	
	Ch: 103.00m to 115.00m	2	12.00	0.20		4.80	
	Ch: 115.00m to 121.00m Culvert Gap		6.00				
	Ch: 121.00m to 136.00m	2	15.00	0.20		6.00	
	Ch: 136.00m to 154.00m	2	18.00	0.20		7.20	
					Total Qty	**52.60**	**Sqm**

Contractor

Asst.Engineer

Asst.Exec.Engineer

Assistant Executive Engi
Vidyaranyapura Sub Divi
B.B.M.P, Bangalore - 9

Name of Work:Improvements to Roads and Drains at Vemanna Layout and Surrounding areas in Ward No. 13, (Doddabommasandra)

MEASUREMENT SHEETS

"FIRST AND FINAL BILL"

Name of Work:Improvements to Roads and Drains at Vemanna Layout and Surrounding areas in Ward No. 13, (Doddabommasandra)									
Detailed Measurements									
Item No	Discription of Item	No	Length	Breadth	Depth	Qty	Unit	Rate	Amount
1	Removing and resetting of footpath slab								
	Vide Premeasurement page no.					155.25			
					Present Qty	**155.25**	**Cum**	**246.52**	**38272.23**
2	Earth work Excavation by manual means for drains,canals, waste weir, draft, approach channels, key trenches, foundation of bridges and such simillar works in all kinds of soils , as per drawing and technical specifications, including setting out, shoring, strutting, barricading, caution lights,								
	Vide Premeasurement page no.					257.53			
					Present Qty	**257.53**	**Cum**	**214.63**	**55273.02**
3	Providing and laying in position Plain Cement Concrete Mix 1:3:6 (M10) for levelling course for all works in foundation. Using 40 mm nominal size graded crushed coarse aggregates and fine aggregates as per relevant IS Codes machine mixed, laid in layers not exceeding 150 mm thickness,								
	Vide Premeasurement page no.					15.23			
					Present Qty	**15.23**	**Cum**	**6408.76**	**97602.21**
6	Providing and laying in position plain cement concrete for levelling course for all works in foundation. The granite / trap / basalt crushed graded coarse aggregates and fine aggregates as								
	Vide Premeasurement page no.					7.40			
					Present Qty	**7.40**	**Cum**	**6609.54**	**48877.55**
7	Providing and laying in position Reinforced cement concrete for all Sub structures of building, Irrigation works, Sub structure works of bridges, Drain works & other parallel works from 0.50m to 3.50 m height. The granite/trap/basalt crushed graded coarse aggregates and fine aggregates as								
	Vide Premeasurement page no.					51.50			
					Present Qty	**51.50**	**Cum**	**7230.80**	**372382.58**
8	Supplying, Fitting and Placing un-coated TMT bar Reinforcement in sub-structure complete as per Drawing and Technical Specifications.								
	Vide Premeasurement page no.					1.76			
					Present Qty	**1.76**	**Tn**	**106354.96**	**187064.55**
13	Earth work in surface Excavation by mechanical means for lowering & leveling the ground for all works other than foundation in all kinds of soils & upto depth not exceeding 300mm as per drawing and technical specifications, including setting out, shoring,								
	Vide Premeasurement page no.					368.94			
					Present Qty	**368.94**	**Cum**	**75.00**	**27670.16**
14	4 Providing, laying, spreading and compacting graded stone aggregate to Wet Mix Macadam specification including premixing the Material with water at OMC in mechanical mix plant carriage of mixed Material by tipper to site, laying in uniform layers with paver/grader in sub-base / base								
	Vide Premeasurement page no.					294.48			
					Present Qty	**294.48**	**Cum**	**2762.44**	**813472.28**
15	Providing and applying Primer Coat with SS1 grade Bitumen Emulsion on prepared surface of granular base including cleaning of road surface and spraying primer at the rate of 0.90 kg per m2 using mechanical								
	Vide Premeasurement page no.					1242.29			
					Present Qty	**1242.29**	**Sqm**	**48.46**	**60201.13**
16	Providing and laying Dense Graded Bituminous Macadam with 40/60 TPH capacity HMP using crushed aggregates of specified grading, premixed with bituminous binder VG30, @ 4.5 per cent by weight of total mix and filler, transporting the hot mix to work site,								
	Vide Premeasurement page no.					62.11			
					Present Qty	**62.11**	**Cum**	**10545.59**	**655031.41**
17	Providing and applying Tack Coat with RS1 Bituminous Emulsion using emulsion pressure distributor at the rate of 0.25 kg/m2 on the prepared bituminous surface cleaned with mechanical								
	Vide Premeasurement page no.					3615.08			
					Present Qty	**3615.08**	**Sqm**	**16.15**	**58383.54**

Assistant Executive Engineer
Vidyaranyapura Sub Division
B.B.M.P, Bangalore - 97

Item No	Discription of Item	No	Length	Breadth	Depth	Qty	Unit	Rate	Amount
20	Loading and Unloading of Stone Boulder / Stone aggregates / Sand / Kankar / Moorum. (Tipper 14								
	Vide Premeasurement page no.					626.46			
					Present Qty	**626.46**	**Cum**	**85.39**	**53493.63**
21	Cost of Haulage Excluding Loading and								
	Vide Premeasurement page no.					801.87			
					Present Qty	**801.87**	**T.Km**	**121.16**	**97154.81**
E1	Providing and constructing load bearing wall with Solid Concrete blocks of size 400x150x200mm having block density more than 1800kg/m3 and minimum compressive strength of 4.00 N/mm2 conforming to IS 2185 (Part - I) - 2005 and constructed with CM 1:4 as per IS 2572:2005 including								
	Vide Premeasurement page no.					52.60			
					Present Qty	**52.60**	**Sqm**	**1231.21**	**64761.71**
E2	Providing B S slabs of selected quality roughly dressed havinf a size of 10 cms thick and fixed in cement mortar (1:6) including fixing curing ete., complete. as directed by the Engineer in Charge of								
	Vide Premeasurement page no.					21.87			
					Present Qty	**21.87**	**Sqm**	**878.01**	**19202.14**

Contractor

Assistant Engineer

Asst. Executive Engineer

Assistant Executive Engineer
Vidyaranyapura Sub Division
B.B.M.P, Bangalore - 97

Name of Work:Improvements to Roads and Drains at Vemanna Layout and Surrounding areas in Ward No. 13, (Doddabommasandra)									
Detailed Measurements									
Date of Measurements									
Item No	Discription of Item	No	Length	Breadth	Depth	Qty	Unit	Rate	Amount
9	Providing and Fixing pre cast Covering Slab made out of CC 1:2:4 with 10cm thick and Finishing cutting, including form work,curing, including cost of all materials, labour, hire charges of machinery, loading, unloading, lead								
	RCC Darin Covering Slab								
	Munireddy Layout								
	2nd A Cross Rd								
	Ch: 0.00m to 20.00m	1	20.00	0.90		18.00			
	Ch: 20.00m to 23.60m		3.60						
	Ch: 23.60m to 28.00m	1	4.40	0.90		3.96			
	Ch: 28.00m to 31.70m		3.70						
	Ch: 31.70m to 37.40m	1	5.70	0.90		5.13			
	Ch: 37.40m to 38.60m		1.20						
	Ch: 38.60m to 42.20m	1	3.60	0.90		3.24			
	Ch: 42.20m to 51.90m		9.70						
	Ch: 51.90m to 55.40m	1	3.50	0.90		3.15			
	Ch: 55.40m to 61.50m		6.10						
	Ch: 61.50m to 80.90m	1	19.40	0.90		17.46			
	Missing or Damaged Slab	115	0.60	0.90		62.10			
		70	0.60	0.90		37.80			
		62	0.60	0.90		33.48			
		60	0.60	0.90		32.40			
		70	0.60	0.90		37.80			
					Total Qty	**254.52**	**Sqm**	**2173.53**	**553206.86**

Contractor

Asst.Engineer

Assistant Executive Engineer
Vidyaranyapura Sub Division
B.B.M.P, Bangalore - 97

Name of Work:Improvements to Roads and Drains at Vemanna Layout and Surrounding areas in Ward No. 13, (Doddabommasandra)

Detailed Measurements

Date of Measurements

Item No	Discription of Item	No	Length	Breadth	Depth	Qty	Unit	Rate	Amount
18	Providing and laying Bituminous Concrete with 40/60 TPH capacity hot mix plant using crushed aggregates of specified grading, premixed with bituminous binder VG-30, @ 5.4 percent of mix and filler, transporting the hot mix to work site, laying with mechanical paver finisher to the required grade,level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction								
	Asphalt Road								
	Vemmanna Layout								
	1st Cross Rd								
	Ch: 0.00m to 30.00m	1	30.00	(6.60 + 5.80)/2	0.04	7.44			
	Ch: 30.00m to 60.00m	1	30.00	(5.80 + 5.10)/2	0.04	6.54			
	Ch: 60.00m to 84.00m	1	24.00	(5.10 + 6.70)/2	0.04	5.66			
	Ch: 84.00m to 114.00m	1	30.00	(4.80 + 4.90)/2	0.04	5.82			
	Ch: 114.00m to 144.00m	1	30.00	(4.90 + 5.40)/2	0.04	6.18			
	Ch: 144.00m to 174.00m	1	30.00	(5.40 + 4.80)/2	0.04	6.12			
	Ch: 174.00m to 180.80m	1	6.80	(4.80 + 4.80)/2	0.04	1.31			
	Ch: 180.80m to 182.80m	1	2.00	(3.50 + 3.50)/2	0.04	0.28			
	3rd Cross Rd								
	Ch: 0.00m to 30.00m	1	30.00	(4.50 + 4.50)/2	0.04	5.40			
	Ch: 30.00m to 60.00m	1	30.00	(4.50 + 4.40)/2	0.04	5.34			
	Ch: 60.00m to 65.20m	1	5.20	(4.40 + 4.50)/2	0.04	0.93			
	Munireddy Layout								
	2nd A Cross Rd								
	Ch: 0.00m to 30.00m	1	30.00	(5.10 + 4.80)/2	0.04	5.94			

Contractor

Asst.Engineer

Asst.Exec.Engineer

Assistant Executive Engi
Vidyaranyapura Sub Divi
B.B.M.P, Bangalore - 9

Item No	Discription of Item	No	Length	Breadth	Depth	Qty	Unit	Rate	Amount
	Ch: 30.00m to 60.00m	1	30.00	(4.80 + 4.95) / 2	0.04	5.85			
	Ch: 60.00m to 83.40m	1	23.40	(4.95 + 4.20) / 2	0.04	4.28			
	2nd B Cross Rd								
	Ch: 0.00m to 30.00m	1	30.00	(6.05 + 3.75) / 2	0.04	5.88			
	Ch: 30.00m to 60.00m	1	30.00	(3.75 + 2.50) / 2	0.04	3.75			
	Main Rd								
	Ch: 0.00m to 30.00m	1	30.00	(4.55 + 4.10) / 2	0.04	5.19			
	Ch: 30.00m to 50.00m	1	20.00	(4.10 + 6.20) / 2	0.04	4.12			
	Ch: 50.00m to 80.00m	1	30.00	(4.45 + 4.40) / 2	0.04	5.31			
	Ch: 80.00m to 107.30m	1	27.30	(5.20 + 5.00) / 2	0.04	5.57			
					Total Qty	**96.91**	**Cum**	**12244.03**	**1186527.32**

Contractor

Asst.Engineer

Asst.Exec.Engineer

Assistant Executive Engi
Vidyaranyapura Sub Div
B.B.M.P, Bangalore -

Name of Work:Improvements to Roads and Drains at Vemanna Layout and Surrounding areas in Ward No. 13, (Doddabommasandra)									
Detailed Measurements									
Date of Measurements									
Item No	Discription of Item	No	Length	Breadth	Depth	Qty	Unit	Rate	Amount
19	Road Marking with Hot Applied Thermoplastic Compound with Reflectorising Glass Beads on Bituminous Surface Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads @ 250 g/ m2 area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35:2015.The finished surface to be level, uniform and free from streaks and holes.								
	Asphalt Road								
	Vemmanna Layout								
	1st Cross Rd								
	Ch: 0.00m to 30.00m	2	30.00	0.10		6.00			
	Ch: 30.00m to 60.00m	2	30.00	0.10		6.00			
	Ch: 60.00m to 84.00m	2	24.00	0.10		4.80			
	Ch: 84.00m to 114.00m	2	30.00	0.10		6.00			
	Ch: 114.00m to 144.00m	2	30.00	0.10		6.00			
	Ch: 144.00m to 174.00m	2	30.00	0.10		6.00			
	Ch: 174.00m to 180.80m	2	6.80	0.10		1.36			
	Ch: 180.80m to 182.80m	2	2.00	0.10		0.40			
	3rd Cross Rd								
	Ch: 0.00m to 30.00m	2	30.00	0.10		6.00			
	Ch: 30.00m to 60.00m	2	30.00	0.10		6.00			
	Ch: 60.00m to 65.20m	2	5.20	0.10		1.04			
	Munireddy Layout								
	2nd A Cross Rd								
	Ch: 0.00m to 30.00m	2	30.00	0.10		6.00			
	Ch: 30.00m to 60.00m	2	30.00	0.10		6.00			
	Ch: 60.00m to 83.40m	2	23.40	0.10		4.68			
	2nd B Cross Rd								
	Ch: 0.00m to 30.00m	2	30.00	0.10		6.00			
	Ch: 30.00m to 60.00m	2	30.00	0.10		6.00			
	Main Rd								
	Ch: 0.00m to 30.00m	2	30.00	0.10		6.00			
	Ch: 30.00m to 50.00m	2	20.00	0.10		4.00			
	Ch: 50.00m to 80.00m	2	30.00	0.10		6.00			
	Ch: 80.00m to 107.30m	2	27.30	0.10		5.46			
					Total Qty	**99.74**	**Sqm**	**551.56**	**55012.59**

Contractor

Asst.Engineer

Asst.Exec.Engineer

Assistant Executive En
Vidyaranyapura Sub Di
B.B.M.P, Bangalore

Name of Work:Improvements to Roads and Drains at Vemanna Layout and Surrounding areas in Ward No. 13, (Doddabommasandra)									
Detailed Measurements									
Date of Measurements									
Item No	Discription of Item	No	Length	Breadth	Depth	Qty	Unit	Rate	Amount
E2	Providing B S slabs of selected quality roughly dressed havinf a size of 10 cms thick and fixed in cement mortar (1:6) including fixing curing ete., complete. as directed by the Engineer in Charge of the work								
	Munireddy Layout								
	2nd A Cross Rd								
	Ch: 0.00m to 20.00m		20.00						
	Ch: 20.00m to 23.60m	1	3.60	0.90		3.24			
	Ch: 23.60m to 28.00m		4.40						
	Ch: 28.00m to 31.70m	1	3.70	0.90		3.33			
	Ch: 31.70m to 37.40m		5.70						
	Ch: 37.40m to 38.60m	1	1.20	0.90		1.08			
	Ch: 38.60m to 42.20m		3.60						
	Ch: 42.20m to 51.90m	1	9.70	0.90		8.73			
	Ch: 51.90m to 55.40m		3.50						
	Ch: 55.40m to 61.50m	1	6.10	0.90		5.49			
	Ch: 61.50m to 80.90m		19.40						
						Total Qty	**21.87**	**Sqm**	**878.01**	**19202.14**
								Total	**4443590.73**
								GST 18%	**799846.33**
								Grand Total	**5243437.07**

Contractor

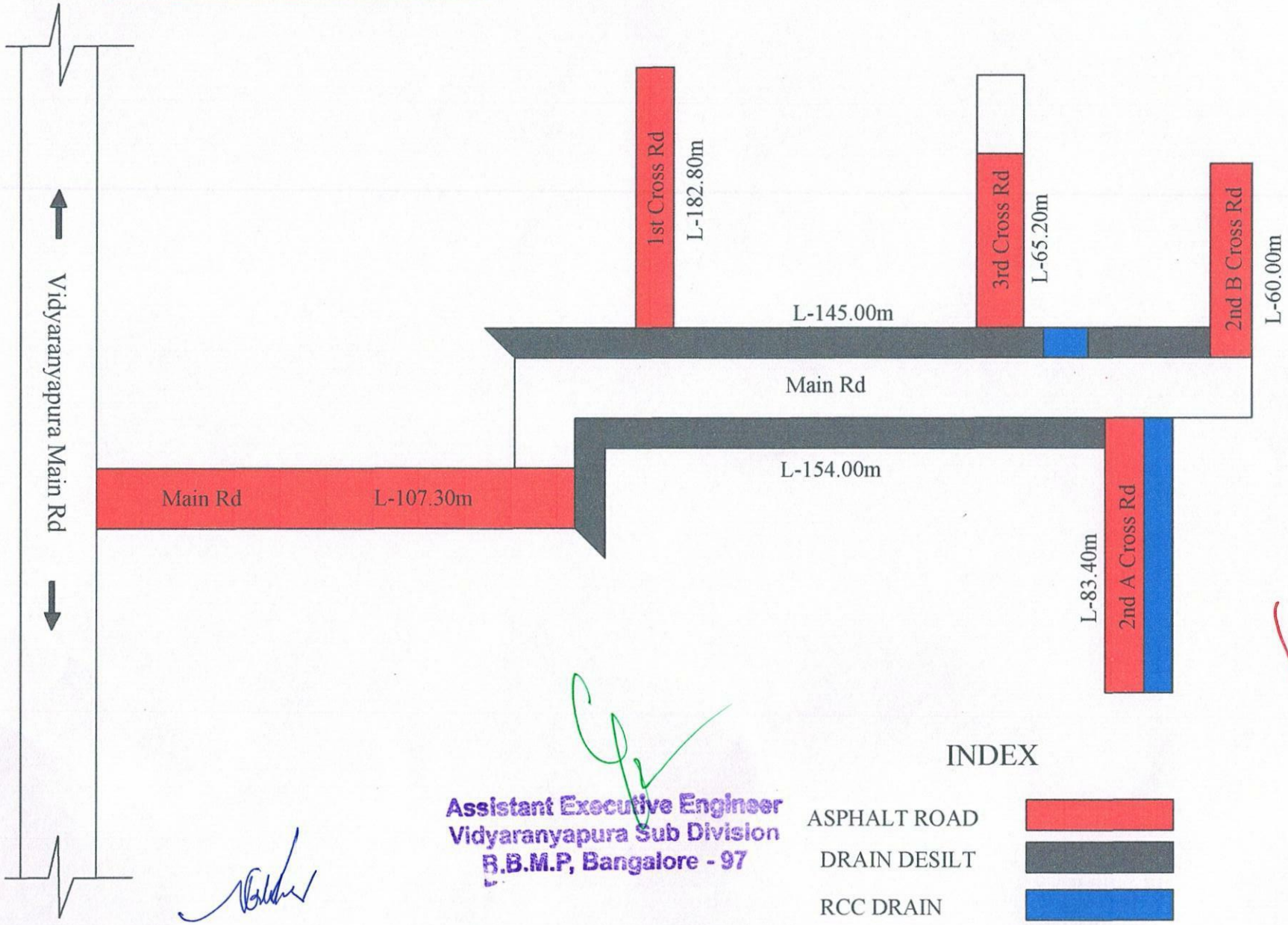
Asst.Engineer

Asst.Exec.Engineer

Assistant Executive Engine
Vidyaranyapura Sub Divisi
B.B.M.P, Bangalore - 97

Name of Work: Improvements to Roads and Drains at Vemanna Layout and Surrounding areas in Ward No. 13, (Doddabommasandra)

Vemanna Layout



Assistant Executive Engineer
Vidyaranyapura Sub Division
B.B.M.P, Bangalore - 97